

WHAT IS CLAIMED IS:

1. An optical apparatus comprising:

5 a focus detection unit detecting a focus state of an image-taking optical system with respect to an object included in a focus detection area;

a first operating member which is operated for changing at least one of a size and a position of the focus detection area;

10 a memory storing a plurality of focus detection areas which differ from each other in at least one of size and position; and

a controller performing a storage process of storing the plurality of focus detection areas into
15 the memory and a setting process of setting, from the stored plurality of focus detection areas, a focus detection area used for detection of the focus state.

2. The optical apparatus according to claim 1,
20 further comprising:

an image-pickup element, which photoelectrically converts an object image formed by the image-taking optical system;

wherein the focus detection unit generates a
25 focus evaluation signal representing a contrast state of a signal component of a video signal obtained using the image-pickup element, the signal component

corresponding to the focus detection area; and

wherein the controller performs such a focus control of the image-taking optical system that the focus evaluation signal takes on a predetermined level
5 or more.

3. The optical apparatus according to claim 1, further comprising:

a second operating member which is operated for
10 selecting one of the plurality of stored focus detection areas;

wherein the controller performs the setting process in response to an operation of the second operating member.

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4. The optical apparatus according to claim 1, further comprising:

a plurality of second operating members;

wherein the controller, in response to a first
20 operation of one of the second operating members, stores the focus detection area at the time of the first operation in the memory in association with the second operating member subjected to the first operation; and

25 wherein the controller, in response to a second operation of one of the second operating members, sets the focus detection area stored in the memory in

association with the second operating member subjected to the second operation as a to-be-used focus detection area.

5 5. The optical apparatus according to claim 1, further comprising:

a second operating member, which can switch between a first state and a second state;

10 wherein the controller stores a focus detection area of the first state and a focus detection area of the second state in the memory in association with the respective states; and

15 wherein the controller sets, from the focus detection areas stored in the memory, the focus detection area associated with the state of the second operating member as a to-be-used focus detection area.

6. The optical apparatus according to claim 1, further comprising:

20 a second operating member, which can switch between a first state and a second state; and

a third operating member;

25 wherein the controller, in response to a first operation of the third operating member, stores a focus detection area at the time of the first operation in association with the first state in the memory, and stores a focus detection area while the

third operating member is not operated in association with the second state in the memory; and

wherein the controller sets, after storing into the memory, the focus detection area associated with the state of the second operating member as a to-be-used focus detection area.

7. The optical apparatus according to claim 1, further comprising:

10 a fourth operating member;

wherein the controller, in response to an operation of the fourth operating member, changes a to-be-used focus detection area to an initial focus detection area set in accordance with a power-on of the optical apparatus.

8. The optical apparatus according to claim 1,

wherein the controller sets at least one of the plurality of stored focus detection areas to a to-be-used focus detection area in accordance with a power-on of the optical apparatus.

9. A camera comprising: a focus detection unit which detects a focus state with respect to an object in a focus detection area;

a plurality of operating members which are operated for changing at least one of a size and a

position of the focus detection area, for memorizing a focus detection area after the at least one of the size and the position is changed and for setting the changed focus detection area.

5